## **CLAIMS**

## What is claimed is:

A solid state multi-spectral light source comprising:
 a plurality of light-emitting diodes, wherein at least two of the light-emitting diodes produce two different colors.

- 2. The light source according to claim 1, wherein the light-emitting diodes are arranged in groups, each group having at least two light-emitting diodes which produce the two different colors.
- 3. The light source according to claim 2, wherein the light-emitting diode groups each include three light-emitting diodes which produce three different colors.
- 4. The light source according to claim 2, wherein the light-emitting diode groups produce two different color light bars that scroll or flash through selective actuation of like colored light-emitting diodes in accordance with an image signal.
- 5. The light source according to claim 1, wherein the light-emitting diodes are defined on a wafer.

- 6. The light source according to claim 1, wherein the light-emitting diodes are formed by a plurality of substrates disposed on a circuit board, each of the light-emitting diodes corresponding to one of the plurality of substrates.
- 7. A multi-spectral light source system comprising:

a light valve; and

a solid state multi-spectral light source that scrolls or flashes different colored light bars onto the light valve to produce a color image, the light source including a plurality of light-emitting diodes, wherein at least two of the light-emitting diodes produce two different colors.

- 8. The light source system according to claim 7, wherein the light-emitting diodes of the light source are arranged in groups, each group having at least two light-emitting diodes which produce the two different colors.
- 9. The light source system according to claim 8, wherein the light-emitting diode groups of the light source each include three light-emitting diodes which produce three different colors.
- 10. The light source system according to claim 8, wherein the light-emitting diode groups of the light source produce two different color light bars that scroll or flash through selective actuation of like colored light-emitting diodes in accordance with an image signal.

- 11. The light source system according to claim 7, wherein the light-emitting diodes of the light source are defined on a wafer.
- 12. The light source system according to claim 7, wherein the light-emitting diodes of the light source are defined by a plurality of substrates disposed on a circuit board, each of the light-emitting diodes corresponding to one of the plurality of substrates.
- 13. A method of producing multi-spectral light, the method comprising:

  providing plurality of light-emitting diodes;

  producing at least two different colors from at least two of the light-emitting diodes.
- 14. The method according to claim 13, wherein the providing step includes arranging the light-emitting diodes in groups each having at least two light-emitting diodes producing the two different colors.
- 15. The method according to claim 14, further comprising selectively actuating like colored light-emitting diodes in the groups in accordance with an image signal to produce two different color light bars that scroll or flash.